

APPARATUS AND METHOD FOR GLASS
SEPARATION FOR FLAT PANEL DISPLAYS

ABSTRACT OF THE DISCLOSURE

5 A method and apparatus for separating glass panels that minimizes process failures and improves separation process consistency by utilizing a separation handle which applies the minimal pressure necessary to remove the edge portion from the glass panel. The glass panel is cut along the score line, which outlines the edge portions of the glass panel to be removed. The panel is placed upon the separating apparatus, which pumps nitrogen along the underside of the glass panel, causing the glass panel to float above the apparatus. Locating pins are inserted to position the panel on the stage. Once the glass panel is in place, a vacuum sucks the panel against the stage, holding the panel tightly against the stage. The separation handle is then inserted over the edge portion to be removed. A measured force is applied to the handle, with the force incrementally increased until the slow, controllable separation of the edge is achieved. This level of force is maintained until separation is complete.

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